between the data-collection sites and Campbell Creek. The canals at sites B2 and B3 are each about 12 ft wide. At site B2, the canal is 3 ft deep; at site B3, the canal is 4 ft deep.

Data were collected downstream from flashboard risers at sites B2 and B3 and in Campbell Creek at site C1 to determine nutrient and sediment concentrations and to quantify the effects of flashboard risers on downstream receiving-water quality. Following about 3 years of data collection at sites B2 and B3, flashboard risers were installed in the canals upstream of sites B2 and B3 in April 1991. The flashboard risers were installed by landowners with assistance from the Beaufort County Soil and Water Conservation District. Gages were then installed at sites B2A and B3A (fig. 3) upstream of flashboard risers where water levels were recorded at 15-minute intervals and specific conductance was measured biweekly. Site B2A was placed about 15 ft upstream of riser, and site B3A was placed about 45 ft upstream of riser. Data collection at sites B2, B2A, B3, and B3A continued until May 1992.

Campbell Creek Data-Collection Sites

Upstream of the State Highway 33 bridge, Campbell Creek drains a 5,120-acre (8-mi ^{2}) wetland area known as Gum Swamp (fig. 1, table 1). There is very little agricultural land in the Campbell Creek watershed upstream of the State Highway 33 bridge. With the exception of the canals that drain sites B2 and B3, only one other agricultural drainage canal is known to drain to Campbell Creek upstream of the State Highway 33 bridge.

Between the State Highway 33 bridge and the confluence of Campbell Creek with Goose Creek (fig. 3), an additional 7,610 acres (11.9 mi ^{2}) drain to Campbell Creek, comprising a total drainage area of 12,700 acres (19.9 mi ^{2}) for the entire Campbell Creek watershed. The distance along the axis of the creek from the State Highway 33 bridge to the mouth of the creek is about 5 mi. Land use in the lower part of the Campbell Creek basin is a mixture of agriculture (primarily row crops) and forested wetlands.

Data were collected in Campbell Creek to (1) characterize the salinity regime of the tidal creek, including the effects of freshwater drainage and effects of flashboard risers on salinity, and (2) evaluate the effects of flashboard risers on receiving-water nutrient concentrations. Data were collected at six sites (C1-C6) on Campbell Creek (fig. 3). A continuous-recording gaging station (C1) was located on the right bank at the State Highway 33 bridge to record water levels, specific conductance, and water temperature at 15-minute intervals. Specific conductance and water temperature were measured at 30-minute intervals at sites C2-C6, which were placed equidistantly along a longitudinal axis from C1 to the mouth of Campbell Creek.

Additional data are available that were collected as part of another investigation in Goose Creek, 3.5 mi downstream from the confluence with Campbell Creek (Garrett and Bales, 1991; Garrett, 1992) (fig. 3). Water level, specific conductance, water temperature, and dissolved-oxygen concentrations were recorded at 15-minute intervals. Although not presented in this report, these data may be useful in characterizing the salinity regime of Campbell Creek.